

ABSTRACT

An electronic price label (ESL) system providing a delta update of an ESL's registers. In one aspect, an ESL manager receives an indication that an update to one or more of the registers of the ESL may be necessary. The ESL manager sends a data request to a data reader to provide a data reader image to the ESL manager. The data reader image contains a complete listing of the intended or planned contents of all the ESL's registers, some of which may require an update. The ESL manager reads a copy of an ESL data image from an ESL table which includes the current contents of all the ESL's registers. The ESL manager compares the data reader image with the ESL data image to determine an update data image which includes a subset of only those fields which have different content in the data reader image and the ESL data image. The ESL manager sends the update data image to a CBS manager which then transmits one or more messages to the ESL, causing the subset of the ESL's registers to be loaded with the updated content.